

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte AUGUSTIN T. CHEN,
JONG-SHING GUO, and
MESHACH OJUNGA-ANDREW

Appeal 2009-003469
Application 10/885,198
Technology Center 1700

Decided: October 13, 2009

Before CATHERINE Q. TIMM, JEFFREY T. SMITH, and
JEFFREY B. ROBERTSON, *Administrative Patent Judges*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

I. STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 22, 24, 27, and 29. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

The invention relates to aqueous pressure sensitive adhesive (PSA) compositions and, more particularly, such compositions that in dry form are removable or repositionable and adapted for use in conventional transfer coating processes (Spec. 1:12-16). The invention further relates to articles including the PSA coated onto a face stock material (Claim 27). Claim 22 is illustrative of the adhesive composition:

22. A transfer coatable, removable or repositionable aqueous adhesive composition comprising:

- (a) from about 5 to about 75 weight % of an aqueous suspension of polymeric acrylate microspheres;
- (b) from about 25 to about 95 weight % of an aqueous emulsion of crosslinked acrylate polymer; and optionally,
- (c) a functionally effective amount of one or more auxiliary ingredients for modifying coating or enhancing adhesive performance properties;

wherein the weight ratio, on a solids basis, of microspheres to crosslinked acrylate polymer is about 0.025:1 to about 1.9:1, and;

wherein said polymeric acrylate microspheres are [sic] solid, and are produced by the process comprising: A) contacting a polymerizable aqueous emulsion of at least one non-ionic monomer of an alkyl acrylate or alkyl methacrylate ester of a non-tertiary alcohol and at least one ionic monomer copolymerizable with said non-ionic monomer and at least one non-free radically polymerizable acid; and B) polymerizing the emulsion to form an aqueous suspension of said solid polymeric pressure sensitive adhesive microspheres; wherein said non-free radically polymerizable acid is contacted with said polymerizable aqueous emulsion prior to achieving about 95% conversion of said non-ionic monomer.

The Examiner maintains, and Appellants appeal, the rejection of claims 22, 24, 27, and 29 under 35 U.S.C. § 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over Morris (US 5,514,122, issued May 7, 1996).

II. MAIN ISSUE

The main issue is: Have Appellants established that the Examiner reversibly erred in finding that the evidence reasonably supports a finding that Morris inherently teaches an adhesive composition meeting the requirements of the claims despite differences in processing?

We answer this question in the negative.

III. FINDINGS OF FACT

The following enumerated Findings of Fact (FF) are particularly relevant:

1. The Examiner finds, with citations to Morris in support, that Morris teaches a PSA composition having the chemical composition required by the claims (Ans. 3-4).
2. As found by the Examiner, and not disputed by Appellants, Morris describes forming solid acrylate microspheres from monomers of the same type as those claimed (Ans. 3-5, *see also* Morris, col. 2, ll. 37-48; col. 3, ll. 3-10; col. 4, ll. 8-12; col. 4, ll. 58-65; Examples 1-7).
3. The Examiner acknowledges that Morris describes a one-step process for making the microspheres, which is different from the two-step process of claims 22 and 27 (Ans. 4-6).

4. The Examiner further acknowledges that Morris does not include a non-free radically polymerizable acid in the microsphere-forming emulsion (*Id.*), but finds that Appellants' non-free radically polymerizable acid does not become a part of the microspheres (Ans. 6).

5. Appellants' Specification states that:

Non-free radically polymerizable acids that can be employed include any of the numerous acids known in the art that are not free radically polymerizable. Typically, acids that are not free radically polymerizable do not comprise carbon-carbon double bonds and may be either organic or inorganic. Examples of suitable non-free radically polymerizable acids include, but are not limited to, acetic acid, hexanoic acid, phenyl undecanoic acid, stearic acid, hydrochloric acid, sulfuric acid or mixtures thereof. Currently, the preferred non-free radically polymerizable acid is sulfuric acid due to the excellent results achieved therewith.

(Spec. 8:16-29.)

6. The non-free radically polymerizable acid is added in an amount sufficient to adjust the pH of the reaction mixture (Spec. 8:30-34).

7. Based upon the similarities in starting materials and acrylate-based composition, the Examiner finds the differences in processing do not appear to amount to a patentable difference in composition, and shifts the burden to Appellants to establish an unobvious difference (Ans. 3-6).

8. Appellants contend that Tables 4-7 reproduced in the Specification "demonstrate the superior qualities of the adhesives produced in

accordance with Appellants' invention." (Br. 4.) Appellants do not further explain the relevance of the data.

9. The Examiner provides an analysis of the data (Ans. 6-7). This analysis is not disputed by Appellants (*see* Brief, generally). According to the Examiner: (1) interpretation of the data is not a straightforward matter (Ans. 6); (2) none of the tested compositions include all of the components recited in the process of making the microspheres recited in claims 22 and 27 (Ans. 6, discussing Examples 2.1a-2.1c at Spec. 24-25); and (3) the data is not based on a side-by-side comparison of microspheres made by the claimed process and including non-free radically polymerizable acids with examples of microspheres made with the acids (Ans. 7).

IV. PRINCIPLES OF LAW

It has long been held that "[i]f the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1317 (Fed. Cir. 2006) (*quoting In re Thorpe*, 777 F.2d 695, 697 (Fed. Cir. 1985)).

"[W]hen the prior art evidence reasonably allows the PTO to conclude that a claimed feature is present in the prior art, the evidence 'compels such a conclusion if the applicant produces no evidence or argument to rebut it.'" *In re Crish*, 393 F.3d 1253, 1259 (Fed. Cir. 2004) (*quoting In re Spada*, 911 F.2d 705, 708 n.3 (Fed. Cir. 1990)).

Evidence of unexpected results is relevant to obviousness but not anticipation. *In re Malagari*, 499 F.2d 1297, 1303 (CCPA 1974).

Appellants must submit clear and convincing evidence to support their allegation of unexpected results. *In re Heyna*, 360 F.2d 222, 228 (CCPA 1966); *see also In re Borkowski*, 505 F.2d 713, 718 (CCPA 1974) (A mere pleading unsupported by proof or showing of facts is inadequate). The results must be shown to be superior compared to the results of the closest prior art. *In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984). Moreover, the examples must be truly comparative such that the cause and effect sought to be proven is not lost in a welter of unfixed variables. *In re Dunn*, 349 F.2d 433, 439 (CCPA 1965).

V. ANALYSIS

While Appellants contend generally that Morris does not teach or suggest the adhesive composition and article of Appellants' invention (Br. 4-5), Appellants' only specific arguments focus on the composition of the microspheres and on data allegedly demonstrating "superior qualities." (Br. 4.) Specifically, Appellants argue that the microspheres discussed in Morris, as referenced by the Examiner at column 4, lines 58-65, differ from Appellants' invention as claimed, and that the solid microspheres of Appellants' invention are not produced by the one-step process discussed in Morris. Appellants further allege that the data provided in Appellants' specification at least in Tables 4, 5, 6, and 7 demonstrate the superior qualities of the adhesives produced in accordance with Appellants' invention (Br. 4). Appellants do not cite any particular portion of Morris as showing that the microspheres of Morris have a different composition than that claimed, nor do Appellants explain how Tables 4, 5, 6, and 7 support their allegation of unexpected results (Br. 4-5).

The Examiner, on the other hand, has cited specific passages of Morris that support the Examiner's finding that Morris describes polymeric acrylate microspheres of the same or substantially the same composition as that claimed (FF 1-2). The Examiner's finding is reasonable based upon these disclosures within Morris.

Based upon the reasonable finding that the chemical composition of the microspheres is the same or substantially the same as that of the claims, the Examiner has reasonably shifted the burden to Appellants to show that the differences in processing, i.e., the use of a one-step emulsification rather than the claimed two-step emulsification and the use of a non-free radically polymerizable acid, result in an unobvious difference in the chemical composition of the microsphere product (FF 3-4 and 7). The Examiner's approach is well-settled in case law. *See SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d at 1317. Appellants offer no convincing evidence that their process provides a difference in composition over the process of Morris. Moreover, Appellants' Specification indicates that the "non-free radically polymerizable acid" is not a reactant, but simply added to adjust pH (FF 5-6). As such, it is reasonable to conclude that the addition of a non-free radically polymerizable acid does not change the composition of the product. The evidence supports the position of the Examiner.

With regard to Appellants' allegation that their Tables 4-7 demonstrate the superior qualities of the claimed adhesive (FF 8), Appellants' broad brush statement in the Brief is not enough to overcome the prima facie case of unpatentability. While the rejection relies upon § 103 alternatively to § 102, this is not the type of rejection that can be overcome by a showing of unexpected results; the rejection is not based on the question of whether it

would have been obvious for one of ordinary skill in the art to modify the teachings of Morris. The rejection is based on the inherent identity of the claimed product to the product of the prior art. Therefore, Appellants must show that their product, even though it appears to be the same as that of Morris, is, in fact, different. Moreover, the Examiner has provided an analysis of the data in Tables 4-7. The Examiner's analysis supports Examiner's position that the evidence is insufficiently probative of unexpected results (FF 9) and Appellants have not responded to this analysis. Under the circumstances, we cannot say that Appellants have shown that the Examiner reversibly erred.

With regard to claims 24 and 29, Appellants further contend that Morris does not teach or suggest the specified dry film peel value of these claims. These claims require a dry film peel value of about 0.2 to about 2.5 pounds per inch peel force on stainless steel with adhesive failure mode. Appellants argue that "the Examiner is incorrect in asserting that the similarity in compositions of Appellants' invention and those provided in Morris would lead one to believe that the adhesive compositions of Morris must inherently have a peel force within the claimed range." (Br. 5.) However, the Examiner has adequately established that the chemical composition of Morris' microspheres is the same or substantially the same as the composition of the claimed microspheres such that the burden was shifted to Appellants to prove otherwise. *See In re Best*, 562 F.2d 1252, 1255 (CCPA 1977). Appellants have not provided such evidence. Compositions having the identical or substantially identical compositions would inherently have identical or substantially identical properties.

With regard to Appellants' generalized statements that Morris does not teach or suggest various aspects of the claims, those statements do not address the specific findings of the Examiner to the contrary (Br. 4-5). As Appellants have not pointed out any particular error in the Examiner's evidentiary basis or reasoning, these arguments are not convincing.

Appellants have not established that the Examiner reversibly erred in finding that the evidence reasonably supports a finding that Morris inherently teaches an adhesive composition meeting the requirements of the claims despite differences in processing.

VI. CONCLUSION

Appellants have limited the scope of their arguments to the above issues and do not further contest the Examiner's rejection of the claims. Therefore, we sustain the rejection of the Examiner.

VII. DECISION

The decision of the Examiner is affirmed.

VIII. TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(v).

AFFIRMED

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